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Supplemental Information Disclosure Statement

This Supplemental Information Disclosure Statement is submitted under 37 C.F.R. §1.97(c)(2) to supplement the Information Disclosure Statements filed on June 19, 2000, June 14, 2001 and September 2, 2003 in connection with the above-identified application.

In accordance with their duty of disclosure under 37 C.F.R. §1.56, applicants direct the Examiner's attention to the following references which are listed on the attached Form PTO-1449 (**Exhibit F**), and certain of which are attached hereto as **Exhibits 1-87**:

1. U.S. Patent No. 5,994,515, issued November 30, 1999 to J.A. Hoxie (**Exhibit 1**);
2. U.S. Patent No. 6,107,019, issued August 22, 2000 to G.P. Allaway et al. (**Exhibit 2**);
3. U.S. Patent No. 6,344,545 B1, issued February 5, 2002 to G.P. Allaway et al. (**Exhibit 3**);
4. U.S. Patent No. 6,548,636 B2, issued April 15, 2003 to T. Dragic and W.C. Olson (**Exhibit 4**);
5. U.S. Patent No. 6,759,519 issued July 6, 2004 to Y. Li and S. M. Ruben (**Exhibit 5**);
6. Pending claims in G.P. Allaway et al., U.S. Serial No. 09/888,938, filed June 25, 2001 (**Exhibit 6**);

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7. Allowed claims in T. Dragic and W.C. Olson, U.S. Serial No. 10/323,314, filed December 19, 2002 (**Exhibit 7**);
8. G.P. Allaway et al., U.S. Serial No. 08/627,684, filed April 2, 1996 (now abandoned) (**Exhibit 8**);
9. G.P. Allaway et al., U.S. Provisional Application No. 60/014,532, filed April 2, 1996;
10. G.P. Allaway et al., U.S. Serial No. 08/663,616, filed June 14, 1996 (now abandoned) (**Exhibit 9**);
11. G.P. Allaway et al., U.S. Provisional Application No. 60/019,715, filed June 14, 1996;
12. G.P. Allaway et al., U.S. Serial No. 08/673,682, filed June 25, 1996 (now abandoned) (**Exhibit 10**);
13. G.P. Allaway et al., U.S. Serial No. 08/665,090, filed June 14, 1996 (now abandoned) (**Exhibit 11**);
14. G.P. Allaway et al., U.S. Provisional Application No. 60/019,941, filed June 14, 1996;
15. G.P. Allaway et al., U.S. Serial No. 08/874,570, filed June 13, 1997 (now abandoned) (**Exhibit 12**);
16. G.P. Allaway et al., U.S. Serial No. 08/874,618, filed June 13, 1997 (now abandoned) (**Exhibit 13**);
17. Pending claims in G.P. Allaway et al., U.S. Serial No. 09/724,105, filed November 28, 2000 (**Exhibit 14**);

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18. Pending claims in G.P. Allaway et al., U.S. Serial No. 09/852,238 filed May 9, 2001 (**Exhibit 15**);
19. W.C. Olson and P.J. Maddon, U.S. Serial No. 09/212,793, filed December 16, 1998 (now abandoned);
20. W.C. Olson and P.J. Maddon, U.S. Provisional Application No. 60/112,532, filed December 16, 1998;
21. W.C. Olson and P.J. Maddon, U.S. Serial No. 09/594,983, filed June 15, 2000 (**Exhibit 16**);
22. W.C. Olson et al., U.S. Serial No. 09/663,219, filed September 15, 2000 (**Exhibit 17**);
23. W.C. Olson and P.J. Maddon, U.S. Provisional Application No. 60/282,380, filed April 6, 2001 (**Exhibit 18**);
24. W.C. Olson et al., U.S. Provisional Application No. 60/266,738, filed February 6, 2001 (**Exhibit 19**);
25. W.C. Olson and P.J. Maddon, U.S. Patent Application Publication No. 2002/0146415 A1, published October 10, 2002 (**Exhibit 20**);
26. W.C. Olson and P.J. Maddon, U.S. Patent Application Publication No. 2002/0106374 A1, published August 8, 2002 (**Exhibit 21**);
27. W.C. Olson and P.J. Maddon, U.S. Serial No. 10/081,128, filed February 22, 2002 (now abandoned) (**Exhibit 22**);

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28. W.C. Olson and P.J. Maddon, U.S. Provisional Application No. 60/358,886, filed February 22, 2002;
29. William C. Olson and Paul J. Maddon, U.S. Publication No. 2003/0044411 A1, published March 6, 2003 (**Exhibit 23**);
30. T. Dragic and W.C. Olson, U.S. Patent Application Publication No. 2003/0092632 A1, published May 15, 2003 (**Exhibit 24**);
31. W.C. Olson et al., U.S. Patent Application Publication No. 2003/0228306 A1, published December 11, 2003 (**Exhibit 25**);
32. Pending claims in W.C. Olson and P.J. Maddon, U.S. Serial No. 10/763,545, filed January 23, 2004 (**Exhibit 26**);
33. Pending claims in G.P. Allaway et al., U.S. Serial No. 09/460,216, filed December 13, 1999 (**Exhibit 27**);
34. PCT International Application Publication No. WO 97/26009, published July 24, 1997 (**Exhibit 28**);
35. PCT International Application Publication No. WO 97/45543, published December 4, 1997 (**Exhibit 29**);
36. PCT International Application Publication No. WO 97/47319, published December 18, 1997 (**Exhibit 30**);
37. PCT International Application Publication No. WO 97/49424, published December 31, 1997 (**Exhibit 31**);

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38. PCT International Application Publication No. WO 98/56421, published December 17, 1998 (**Exhibit 32**);
39. PCT International Application Publication No. WO 00/35409, published June 22, 2000 (**Exhibit 33**);
40. PCT International Application Publication No. WO 01/64710, published September 7, 2001 (**Exhibit 34**);
41. PCT International Application Publication No. WO 02/22077, published March 21, 2002 (**Exhibit 35**);
42. PCT International Application Publication No. WO 02/068608, published September 6, 2002 (**Exhibit 36**);
43. PCT International Application Publication No. WO 02/083172, published October 24, 2002 (**Exhibit 37**);
44. PCT International Application Publication No. WO 03/072766, published September 4, 2003 (**Exhibit 38**);
45. Allaway, G.P., K.L. Davis-Bruno, B.A. Beaudry, E.B. Garcia, E.L. Wong, A.M. Ryder, K.W. Hasel, M.C. Gauduin, R.A. Koup, J.S. McDougal and P.J. Maddon. 1995. Expression and characterization of CD4-IgG2, a novel heterotetramer that neutralizes primary HIV type 1 isolates. AIDS Res Hum Retroviruses 11: 533-539 (**Exhibit 39**);
46. Allaway, G.P., A.M. Ryder, G.A. Beaudry and P.J. Maddon. 1993. Synergistic inhibition of HIV-1 envelope-mediated cell fusion by CD4-based molecules in combination with

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antibodies to gp120 or gp41. AIDS Res Hum Retroviruses 9:
581-587 (**Exhibit 40**);

47. Amara, A., S.L. Gall, O. Schwartz, J. Salamero, M. Montes, P. Loetscher, M. Baggiolini, J.L. Virelizier and F. Arenzana-Seisdedos. 1997. HIV coreceptor downregulation as antiviral principle: SDF-1 α -dependent internalization of the chemokine receptor CXCR4 contributes to inhibition of HIV replication. J. Exp. Med. 186: 139-146 (**Exhibit 41**);
48. Berger, E.A. 1997. HIV entry and tropism: the chemokine receptor connection. AIDS 11 (suppl A): S3-S16 (**Exhibit 42**);
49. Bieniasz, P.D., R.A. Fridell, I. Aramori, S.S.G. Ferguson, M.C. Caron and B.R. Cullen. 1997. HIV-1-induced cell fusion is mediated by multiple regions within both the viral envelope and the CCR5 co-receptor. EMBO 16: 2599-2609 (**Exhibit 43**);
50. Brelot, A., N. Heveker, O. Pleskoff, N. Sol and M. Alizon. 1997. Role of the first and third extracellular domains of CXCR4 in human immunodeficiency virus coreceptor activity. J. Virol. 71: 4744-4751 (**Exhibit 44**);
51. Chan, D.C. and P.S. Kim. 1998. HIV entry and its inhibition. Cell 93: 681-684 (**Exhibit 45**);
52. Connor, R.I., K.E. Sheridan, D. Ceradini, S. Choe and N.R. Landau. 1997. Change in co-receptor use correlates with disease progression in HIV-1 infected individuals.

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J. Exp. Med. 185: 621-628 (**Exhibit 46**);

53. Crump, M.P., J.H. Gong, P. Loetscher, K. Rajarathnam, A. Amara, F. Arenzana-Seisdedos, J.L. Virelizier, M. Baggiolini, B.D. Sykes and I. Clark-Lewis. 1997. Solution structure and basis for functional activity of stromal-cell derived factor-1; disassociation of CXCR4 activation from binding and inhibition of HIV-1. EMBO 16: 6996-7007 (**Exhibit 47**);
54. Dalgleish, A.G., P.C.L. Beverly, P.R. Clapham, D.H. Crawford, M.F. Greaves and R.A. Weiss. 1984. The CD4 (T4) antigen is an essential component of the receptor for the AIDS retrovirus. Nature 312: 763-766 (**Exhibit 48**);
55. Donzella, G.A., D. Schols, S.W. Lin, J.A. Este, K.A. Nagashima, P.J. Maddon, G.P. Allaway, T.P. Sakmar, G. Henson, E.D. Clercq and J.P. Moore. 1998. AMD3100, a small molecule inhibitor of HIV-1 entry via the CXCR4 co-receptor. Nat. Med. 4: 72-77 (**Exhibit 49**);
56. Doranz, B.J., K. Grovit-Ferbas, M.P. Sharron, S.H. Mao, M.B. Goetz, E.S. Daar, R.W. Doms and W.A. O'Brien. 1997. A small molecule inhibitor directed against the chemokine receptor CXCR4 prevents its use as an HIV-1 co-receptor. J. Ex. Med. 186: 1395-1400 (**Exhibit 50**);
57. Doranz, B.J., Z.-H. Lu, J. Rucker, T.-Y. Zhang, M. Sharron, Y.-H. Cen, Z.-X. Wang, H.-H. Guo, J.-G. Du, M.A. Accavitti, R.W. Doms and S.C. Peiper. 1997. Two distinct CCR5 domains can mediate co-receptor usage by human immunodeficiency virus type 1. J. Virol. 71: 6305-6314

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(Exhibit 51);

58. Dragic, T., V. Litwin, G.P. Allaway, S.R. Martin, Y. Huanh, K.A. Nagashima, C. Cayanan, P.J. Maddon, R.A. Koup, J.P. Moore and W.A. Paxton. 1996. HIV-1 entry into CD4+ cells is mediated by the chemokine receptor CC-CKR-5. *Nature* 381: 667-673 **(Exhibit 52);**
59. Hill, C.M., D. Kwon, M. Jones, C.B. Davis, S. Marmon, B.L. Daugherty, J.A. DeMartino, M.S. Springer, D. Unutmaz and D.R. Littman. 1998. The amino terminus of human CCR5 is required for its function as a receptor for diverse human and simian immunodeficiency virus envelope glycoproteins. *Virology* 248: 357-371 **(Exhibit 53);**
60. Kwong, P.D., R. Wyatt, J. Robinson, R.W. Sweet, J. Sodroski and W.A. Hendrickson. 1998. Structure of an HIV gp120 envelope glycoprotein in complex with the CD4 receptor and a neutralizing human antibody. *Nature* 393: 648-659 **(Exhibit 54);**
61. Laal, S., S. Burda, M.K. Gorny, S. Karwowska, A. Buchbinder and S. Zolla-Pazner. 1994. Synergistic neutralization of human immunodeficiency virus type 1 by combinations of human monoclonal antibodies. *J. Virol.* 68: 4001-4008 **(Exhibit 55);**
62. Li, A., H. Katinger, M.R. Posner, L. Cavacini, S. Zolla-Pazner, M.K. Gorny, J. Sodroski, T.C. Chou, T.W. Baba and R.M. Ruprecht. 1998. Synergistic neutralization of simian-human immunodeficiency virus SHIV-vpu+ by triple and quadruple combinations of human monoclonal antibodies

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and high-titer antihuman immunodeficiency virus type 1 immunoglobulins. J. Virol. 72: 3235-3240 (**Exhibit 56**);

63. Mack, M., B. Luckow, P.J. Nelson, J. Cihak, G. Simmons, P.R. Clapham, N. Signoret, M. Marsh, M. Stangassinger, F. Borlat, T.N.C. Wells, D. Schlondorff and A.E.I. Proudfoot. 1998. Aminooxypentane-RANTES induces CCR5 internalization but inhibits recycling: a novel inhibitory mechanisms of HIV infectivity. J. Ex. Med. 187: 1215-1224 (**Exhibit 57**);
64. McKnight, A., D. Wilkinson, G. Simmons, S. Talbot, L. Picard, M. Ahuja, M. Marsh, J.A. Hoxie and P.R. Clapham. 1997. Inhibition of human immunodeficiency virus fusion by a monoclonal antibody to a coreceptor (CXCR3) is both cell type and virus strain dependent. J. Virol. 71: 1692-1696 (**Exhibit 58**);
65. Strizki, J.M., J. Davis-Turner, R.G. Collman, J. Hoxie and F. Gonzalez-Scarano. 1997. A monoclonal antibody (12G5) directed against CXCR4 inhibits infection with the dual-tropic human immunodeficiency virus type 1 isolate HIV-1 89.6 but not the T-tropic isolate HIV-1 HxB. J. Virol. 71: 5678-5683 (**Exhibit 59**);
66. Trkola, A., T. Dragic, J. Arthos, J. Binley, W.C. Olson, G.P. Allaway, C. Cheng-Mayer, J. Robinson, P.J. Maddon and J.P. Moore. 1996. CD4-dependent, antibody sensitive interactions between HIV-1 and its co-receptor CCR-5. Nature 384: 184-187 (**Exhibit 60**);
67. Vijh-Warrier, S., A. Pinter, W.J. Honnen and S.A. Tilley. 1996. Synergistic neutralization of human

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immunodeficiency virus type 1 by a chimpanzee monoclonal antibody against the V2 domain of gp120 in combination with monoclonal antibodies against the V3 loop and the CD4-binding site. J. Virol. 70: 4466-4473 (**Exhibit 61**);

68. Wu, L., G. LaRosa, N. Kassam, C.J. Gordon, H. Heath, N. Ruffing, H. Chen, J. Humblis, M. Samson, M. Parmentier, J.P. Moore and C.R. Mackay. 1997. Interaction of chemokine receptor CCR5 with its ligands: multiple domains for HIV-1 gp120 binding and a single domain for chemokine binding. J. Exp. Med. 186: 1373-1381 (**Exhibit 62**);
69. Ylisastigui, L., J.J. Vizzavona, E. Drakopoulou, P. Paindavoine, C.F. Calvo, M. Parmentier, J.C. Gluckman, C. Vita and A. Benjouad. 1998. Synthetic full length and truncated RANTES inhibit HIV-1 infection of primary macrophages. AIDS 12: 977-984 (**Exhibit 63**);
70. Tilley, S. A., W.J. Honnen, S. Warriar, M.E. Racho, T.C. Chou, M. Girard, E. Muchmore, M. Hilgartner, D.D. Ho, M.S.C. Fung, and A. Pinter. 1991. Potent Neutralization of HIV-1 by Human and Chimpanzee Monoclonal Antibodies Directed Against Three Distinct Epitope Clusters of gp120. Sixieme Colloque Des Cent Gardes. 211-216 (**Exhibit 64**);
71. Tilley, S.A., W.J. Honnen, M.E. Racho, T.C. Chou, and A. Pinter. 1992. Synergistic Neutralization of HIV-1 by Human Monoclonal Antibodies Against the V3 Loop and the CD4-Binding Site of gp120. AIDS Research and Human Retroviruses 80:4: 461-467 (**Exhibit 65**);

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72. Choe, H., M. Farzan, Y. Sun, N. Sullivan, B. Rollins, P.D. Ponath, L. Wu, C.R. Mackay, G. LaRosa, W. Newman, N. Gerard, C. Gerard, and J. Sodroski. 1996. The Beta-Chemokine Receptors CCR3 and CCR5 Facilitate Infection by Primary HIV-1 Isolates. Cell 85: 1135-1148 **(Exhibit 66)**;
73. Doranz, B.J., J. Rucker, Y. Yi, R. Smyth, M. Samson, S.C. Peiper, M. Parmentier, R.G. Collman, and R.W. Doms. 1996. A Dual-Tropic Primary HIV-1 Isolate That Uses Fusin and Beta-Chemokine Receptors CKR-5, CKR-3, and CKR-2b as Fusion Cofactors. Cell 85: 1149-1158 **(Exhibit 67)**;
74. Deng, H., R. Liu, W. Ellmeier, S. Choe, D. Unutmaz, M. Burkhart, P.D. Marzio, S. Marmon, R.E. Sutton, C.M. Hill, C.B. Davis, S.C. Peiper, T.J. Schall, D.R. Littman, and N.R. Landau. 1996. Identification of a Major Co-Receptor for Primary Isolates of HIV-1. Nature 381: 661-666 **(Exhibit 68)**;
75. Feng, Y., C.C. Broder, P.E. Kennedy, E.A. Berger. 1996. HIV-1 Entry Cofactor: Functional cDNA Cloning of a Seven-Transmembrane, G Protein-Coupled Receptor. Science 272: 872-877 **(Exhibit 69)**;
76. Fradd, F., M.E. Mary. 1989. AIDS Vaccines: An Investor's Guide by Shearman Lehman Hutton. Page 10 (Fig. 2) **(Exhibit 70)**;
77. De Rossi, A., M. Pasti, F. Mummano, M. Panozzo, M. Dettin, C. Di Bello and L. Chieco-Bianchi. 1995. Synthetic Peptides from the Principle Neutralizing Domain of Human Immunodeficiency Virus Type 1 (HIV-1) Enhance

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HIV-1 Infection through a CD4-Dependent Mechanism.
Virology 184:187-196 (**Exhibit 71**);

78. PCT International Publication No. WO 98/18826, published May 7, 1998 (**Exhibit 72**);
79. Chen et al. 1997. Genetically Divergent Strains of Simian Immunodeficiency Virus Use CCR5 as a Coreceptor for Entry. J. of Virol. 71(4): 2705-2714 (**Exhibit 73**);
80. U.S. Patent No. 6,528,625, issued March 4, 2003 to Wu et al. (**Exhibit 74**);
81. Li et al., U.S. Patent Application Publication No. 2003/0023044, published January 30, 2003 (**Exhibit 75**);
82. Rosen et al., U.S. Patent Application Publication No. 2002/0048786, published April 25, 2002, filed February 9, 2001 (**Exhibit 76**);
83. Rosen et al., U.S. Patent Application Publication No. 2002/0061834, published May 23, 2002, filed February 9, 2001 (**Exhibit 77**);
84. Li et al., U.S. Patent Application Publication No. 2002/0076745, published June 20, 2002, filed November 18, 1998 (**Exhibit 78**);
85. Li et al., U.S. Patent Application Publication No. 2002/099176, published July 25, 2002, filed June 25, 1999 (**Exhibit 79**);

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86. Samson et al., U.S. Patent Application Publication No. 2002/0106742, published August 8, 2002, filed August 24, 2001 (**Exhibit 80**);
87. Samson et al., U.S. Patent Application Publication No. 2002/0110805, published August 15, 2002, filed August 24, 2001 (**Exhibit 81**);
88. Samson et al., U.S. Patent Application Publication No. 2002/0110870, published August 15, 2002, filed August 24, 2001 (**Exhibit 82**);
89. Li et al., U.S. Patent Application Publication No. 2002/0132269, published September 19, 2002, filed February 11, 2000 (**Exhibit 83**);
90. Co et al. 1991. Humanized Antibodies for Antiviral Therapy. Proc. Natl. Acad. Sci. U.S.A. 88: 2869-2873 (**Exhibit 84**);
91. Trkola et al. 2001. Potent Broad-spectrum Inhibition of Human Immunodeficiency Virus Type 1 by the CCR5 Monoclonal Antibody PRO 140. J. Virol. 75: 579-588 (**Exhibit 85**);
92. Olson et al. 1999. Differential Inhibition of Human Immunodeficiency Virus Type 1 Fusion, gp 120 Binding and CC-chemokine Activity of Monoclonal Antibodies to CCR5. J. Virol. 73: 4145-4155 (**Exhibit 86**); and
93. Parren et al. 2001. Antibody Protects Macaques Against Vaginal Challenge with a Pathogenic R5 Simian/Human Immunodeficiency Virus at Serum Levels Giving Complete

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Neutralization In Vitro. J. Virol. 75: 8340-8347 (**Exhibit 87**).

The Examiner is respectfully requested to make these references of record in the present application by initialing and returning a copy of the enclosed Form PTO 1449.

In the April 2, 2004 Office action, the Examiner stated that the Information Disclosure Statements filed June 20, 2000, July 18, 2001 and September 4, 2004 fail to comply with 37 CFR 1.98(a)(2) which requires a legible copy of each U.S. and foreign patent, each publication or that portion which caused it to be listed, and all other information or that portion which caused it to be listed. Accordingly, the Examiner stated that these Information Disclosure Statements have been placed in the application file, but that the information referred to therein has not been considered. During an April 14, 2004 telephone conference with Ashton J. Delauney, Esq. of the undersigned's office, the Examiner further explained that she had been unable to locate copies of any of the references submitted in the June 20, 2000, July 18, 2001 and September 4, 2003 Information Disclosure Statements. The Examiner requested that copies of these references be re-submitted to the Patent Office.

In response, applicants note that copies of the above-listed references 45 to 75 were previously submitted to the Patent Office as Exhibits 1-31 in an Information Disclosure Statement filed June 19, 2000 in connection with the subject application. Applicants attach hereto as part of **Exhibit G** a copy of the date-stamped postcard returned to applicants' representatives confirming receipt of the June 19, 2000

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Information Disclosure Statement and Exhibits 1-31 attached thereto.

Applicants also note that copies of the above-listed references 76 and 77 were previously submitted to the Patent Office as Exhibits 1 and 2 in a Supplemental Information Disclosure Statement filed June 14, 2001 in connection with the subject application. Applicants include in **Exhibit G** a copy of the date-stamped postcard returned to applicants' representatives confirming receipt of the June 14, 2001 Supplemental Information Disclosure Statement and Exhibits 1 and 2 attached thereto.

Applicants note further that copies of the above-listed references 78 to 93 were previously submitted to the Patent Office as Exhibits B-Q in a Supplemental Information Disclosure Statement filed September 2, 2003 in connection with the subject application. Applicants also include in **Exhibit G** a copy of the date-stamped postcard returned to applicants' representatives confirming receipt of the September 2, 2003 Supplemental Information Disclosure Statement and Exhibits B-Q attached thereto.

Nevertheless, further to the Examiner's April 14, 2004 telephone request, applicants attach hereto copies of these previously submitted references as **Exhibits 39-87**.

37 C.F.R. §1.98(a)(2)(iii) provides that an Information Disclosure Statement shall include, for each cited pending U.S. application, a legible copy of the application specification including the claims and any drawing of the application, or that portion of the application which caused

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it to be listed including any claims directed to that portion. Under 37 C.F.R. §1.98(c), when the disclosures of two or more patents or publications listed in an Information Disclosure Statement are substantively cumulative, a copy of one of the patents or publications may be submitted without copies of the other patents or publications, provided it is stated that these other patents or publications are cumulative. In accordance with 37 C.F.R. §1.98(c), copies of certain of the references listed above are not being submitted herewith as they are cumulative.

Specifically, U.S. Serial No. 09/888,938, filed June 25, 2001 (and published October 24, 2002 as U.S. Patent Application Publication No. 2002/0155429), is a continuation of U.S. Serial No. 10/831,823, filed April 2, 1997, which issued as U.S. Patent No. 6,344,545 B1 (reference 3). Therefore, a copy of Application Publication No. 2002/0155429 is not attached hereto. However, in accordance with 37 C.F.R. §1.98(a)(2)(iii), a copy of the claims pending in U.S. Serial No. 09/888,938 is attached hereto as Exhibit 6.

U.S. Serial No. 10/323,314, filed December 19, 2002 (and published July 24, 2003 as U.S. Patent Application Publication No. 2003/0139571), is a continuation of U.S. Serial No. 09/796,202, filed February 28, 2001 which issued as U.S. Patent No. 6,548,636 B2 (reference 4). Therefore, a copy of Application Publication No. 2003/0139571 is not attached hereto. However, in accordance with 37 C.F.R. §1.98(a)(2)(iii), a copy of the claims allowed in U.S. Serial No. 10/323,314 is attached hereto as Exhibit 7.

U.S. Serial No. 09/852,238, filed May 9, 2001 (and published

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May 6, 2004 as U.S. Patent Application Publication No. 2004/0086528), is a continuation of 09/724,105, filed November 28, 2000, which is a continuation of U.S. Serial No. 08/874,618, filed June 13, 1997 (reference 16). Therefore, copies of U.S. Serial No. 09/724,105 and Application Publication No. 2004/0086528 are not attached hereto. However, in accordance with 37 C.F.R. §1.98(a)(2)(iii), copies of the claims pending in U.S. Serial No. 09/724,105 and U.S. Serial No. 09/852,238 are attached hereto as Exhibits 14 and 15, respectively.

U.S. Serial No. 10/763,545, filed January 23, 2004, is a continuation of U.S. Serial No. 09/594,983, filed June 15, 2000 (reference 21). Therefore, a copy of U.S. Serial No. 10/763,545 is not attached hereto. However, in accordance with 37 C.F.R. §1.98(a)(2)(iii), a copy of the claims pending in U.S. Serial No. 10/763,545 is attached hereto as Exhibit 26.

U.S. Serial No. 09/460,216, filed December 13, 1999, is a national stage application of PCT International Application Publication No. WO 98/56421, published December 17, 1998, (reference 38). Therefore, a copy of U.S. Serial No. 09/460,216 is not attached hereto. However, in accordance with 37 C.F.R. §1.98(a)(2)(iii), a copy of the claims pending in U.S. Serial No. 09/460,216 is attached hereto as Exhibit 27.

References 8 and 9 are cumulative to each other since each contains an identical disclosure. Therefore, a copy of reference 9 is not attached hereto.

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References 10 and 11 are cumulative to each other since each contains an identical disclosure. Therefore, a copy of reference 11 is not attached hereto.

References 13 and 14 are cumulative to each other since each contains an identical disclosure. Therefore, a copy of reference 14 is not attached hereto.

References 19, 20, and 21 are cumulative to each other since each contains an identical disclosure except that reference 21 contains an additional paragraph at the beginning of the application claiming the benefit of an earlier application, U.S. Provisional Application No. 60/112,532 (reference 20), and also provides the ATCC Accession Number for the PA10 antibody, which Accession Number is not provided in references 19 and 20. Therefore, copies of references 19 and 20 are not attached hereto.

References 27 and 28 are cumulative to each other since each contains an identical disclosure. Therefore, a copy of reference 28 is not attached hereto.

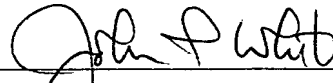
If a telephone interview would be of assistance in advancing prosecution of the subject application, applicants' undersigned attorney invites the Examiner to telephone him at the number provided below.

Pursuant to 37 C.F.R. §1.97(c)(2) and 1.17(p), a fee of one hundred and eighty dollars (\$180.00) is required for filing the enclosed Supplemental Information Disclosure Statement. A fee of four hundred and ninety dollars (\$490.00) is also required for a three-month extension of time for responding to


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the April 2, 2004 Office Action. Accordingly, a check in the total amount of SIX HUNDRED AND SEVENTY DOLLARS (\$670.00) is enclosed. However, if any additional fee is required, authorization is hereby given to charge the amount of any such fee to Deposit Account No. 03-3125.

Respectfully submitted,



John P. White
Registration No. 28,678
Attorney for Applicants
Cooper & Dunham, LLP
1185 Avenue of the Americas
New York, New York 10036
(212) 278-0400

I hereby certify that this correspondence is being deposited this date with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.	
 John P. White Reg. No. 28,678	10/4/04 Date

Form PTO-1449 U.S. Department of Commerce Patent and Trademark Office INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)										Atty. Docket No. 57906-A/JPW/AJD		Serial No. 09/464,902		
										Applicant(s) William C. Olson and Paul J. Maddon				
										Filing Date December 16, 1999				Group Art Unit 1648
U.S. PATENT DOCUMENTS														
Examiner Initials	Exh. No. [§]	Document Number							Date	Name	Class	Subclass	Filing Date If Appropriate	
	1	5	9	9	4	5	1	5	11/30/99	Hoxie				
	2	6	1	0	7	0	1	9	08/22/00	Allaway et al.				
	3	6	3	4	4	5	4	5	02/05/02	Allaway et al.				
	4	6	5	4	8	6	3	6	04/15/03	Dragic et al.				
	5	6	7	5	9	5	1	9	07/06/04	Li et al.				
FOREIGN PATENT DOCUMENTS														
		Document Number							Date	Country	Class	Subclass	Translation	
		Yes	No											
	28	9	7	2	6	0	0	9	07/24/97	PCT				
	29	9	7	4	5	5	4	3	12/04/97	PCT				
	30	9	7	4	7	3	1	9	12/18/97	PCT				
	31	9	7	4	9	4	2	4	12/31/97	PCT				
	32	9	8	5	6	4	2	1	12/17/98	PCT				
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)														
	39	Allaway, G.P., K.L. Davis-Bruno, B.A. Beaudry, E.B. Garcia, E.L. Wong, A.M. Ryder, K.W. Hasel, M.C. Gauduin, R.A. Koup, J.S. McDougal and P.J. Maddon. 1995. Expression and characterization of CD4-IgG2, a novel heterotetramer that neutralizes primary HIV type 1 isolates. AIDS Res Hum Retroviruses 11: 533-539;												
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	41	Amara, A., S.L. Gall, O. Schwartz, J. Salamero, M. Montes, P. Loetscher, M. Baggiolini, J.L. Virelizier and F. Arenzana-Seisdedos. 1997. HIV coreceptor downregulation as antiviral principle: SDF-1a-dependent internalization of the chemokine receptor CXCR4 contributes to inhibition of HIV replication. J. Exp. Med. 186: 139-146;												
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*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609: Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.														

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Applicants: Olson and Maddon
 Serial No. : 09/464,902
 Filed: December 16, 1999
 Exhibit F

Form PTO-1449 U.S. Department of Commerce Patent and Trademark Office INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)		Atty. Docket No. 57906-A/JPW/AJD		Serial No. 09/464,902	
		Applicant(s) William C. Olson and Paul J. Maddon			
		Filing Date December 16, 1999		Group Art Unit 1648	

U.S. PATENT DOCUMENTS														
Examiner Initials	Exh. No. §	Document Number							Date	Name	Class	Subclass	Filing Date If Appropriate	
	6	Pending claims in 09/888,938								Allaway et al.			06/25/01	
	7	Allowed claims in 10/323,314								Dragic et al.			12/19/02	
	8	0	8	6	2	7	6	8	4		Allaway et al.			04/02/96
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	9	0	8	6	6	3	6	1	6		Allaway et al.			06/14/96
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FOREIGN PATENT DOCUMENTS														
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	34	0	1	6	4	7	1	0	09/07/01	PCT				
	35	0	2	2	2	0	7	7	03/21/02	PCT				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)	
44	Brelot, A., N. Heveker, O. Pleskoff, N. Sol and M. Alizon. 1997. Role of the first and third extracellular domains of CXCR4 in human immunodeficiency virus coreceptor activity. J. Virol. 71: 4744-4751;
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EXAMINER	DATE CONSIDERED
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U.S. PATENT DOCUMENTS							
Examiner Initials	Exh. No. [§]	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	11	0 8 6 6 5 0 9 0		Allaway et al.			06/14/96
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	12	0 8 8 7 4 5 7 0		Allaway et al.			06/13/97
	13	0 8 8 7 4 6 1 8		Allaway et al.			06/13/97
	14	Pending claims in 09/724,105		Allaway et al.			11/28/00
	15	Pending claims in 09/852,238		Allaway et al.			05/09/01
FOREIGN PATENT DOCUMENTS							
		Document Number	Date	Country	Class	Subclass	Translation
							Yes No
	36	0 2 0 6 8 6 0 8	09/06/02	PCT			
	37	0 2 0 8 3 1 7 2	10/24/02	PCT			
	38	0 3 0 7 2 7 6 6	09/04/03	PCT			
	72	9 8 1 8 8 2 6	05/07/98	PCT			
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
	49	Donzella, G.A., D. Schols, S.W. Lin, J.A. Este, K.A. Nagashima, P.J. Maddon, G.P. Allaway, T.P. Sakmar, G. Henson, E.D. Clercq and J.P. Moore. 1998. AMD3100, a small molecule inhibitor of HIV-1 entry via the CXCR4 co-receptor. Nat. Med. 4: 72-77;					
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EXAMINER			DATE CONSIDERED				
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		Applicant(s) William C. Olson and Paul J. Maddon					
		Filing Date December 16, 1999		Group Art Unit 1648			
U.S. PATENT DOCUMENTS							
Examiner Initials	Exh. No. [§]	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	16	0 9 5 9 4 9 8 3		Olson et al.			06/15/00
	17	0 9 6 6 3 2 1 9		Olson et al.			09/15/00
	18	60 2 8 2 3 8 0		Olson et al.			04/06/01
	19	60 2 6 6 7 3 8		Olson et al.			02/06/01
	20	2 0 0 2 / 0 1 4 6 4 1 5	10/10/02	Olson et al.			
	21	2 0 0 2 / 0 1 0 6 3 7 4	08/08/02	Olson et al.			
		60 3 5 8 8 8 6		Olson et al.			02/22/02
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
	53	Hill, C.M., D. Kwon, M. Jones, C.B. Davis, S. Marmon, B.L. Daugherty, J.A. DeMartino, M.S. Springer, D. Unutmaz and D.R. Littman. 1998. The amino terminus of human CCR5 is required for its function as a receptor for diverse human and simian immunodeficiency virus envelope glycoproteins. <i>Virology</i> 248: 357-371;					
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Examiner Initials	Exh. No. [§]	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate	
	22	10 0 8 1 1 2 8		Olson et al.			02/22/02	
	23	2 0 0 3 / 0 0 4 4 4 1 1	03/06/03	Olson et al.				
	24	2 0 0 3 / 0 0 9 2 6 3 2	05/15/03	Dragic et al.				
	25	2 0 0 3 / 0 2 2 8 3 0 6	12/11/03	Olson et al.				
	26	Pending claims in 10/763,545		Olson et al.			01/23/04	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)								
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	63	Ylisastigui, L., J.J. Vizzavona, E. Drakopoulou, P. Paindavoine, C.F. Calvo, M. Parmentier, J.C. Gluckman, C. Vita and A. Benjouad. 1998. Synthetic full length and truncated RANTES inhibit HIV-1 infection of primary macrophages. AIDS 12: 977-984;						
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U.S. PATENT DOCUMENTS								
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	27	Pending claims in 09/460,216		Allaway et al.			12/13/99	
	74	6 5 2 8 6 2 5	03/04/03	Wu et al.				
	75	2 0 0 3 / 0 0 2 3 0 4	01/30/03	Li et al.				
	76	2 0 0 2 / 0 0 4 8 7 8 6	04/25/02	Rosen et al.				
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	78	2 0 0 2 / 0 0 7 6 7 4 5	06/20/02	Li et al.				
	79	2 0 0 2 / 0 9 9 1 7 6	07/25/02	Li et al.				
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)								
	66	Choe, H., M. Farzan, Y. Sun, N. Sullivan, B. Rollins, P.D. Ponath, L. Wu, C.R. Mackay, G. LaRosa, W. Newman, N. Gerard, C. Gerard, and J. Sodroski. 1996. The Beta-Chemokine Receptors CCR3 and CCR5 Facilitate Infection by Primary HIV-1 Isolates. Cell 85: 1135-1148;						
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	68	Deng, H., R. Liu, W. Ellmeier, S. Choe, D. Unutmaz, M. Burkhardt, P.D. Marzio, S. Marmon, R.E. Sutton, C.M. Hill, C.B. Davis, S.C. Peiper, T.J. Schall, D.R. Littman, and N.R. Landau. 1996. Identification of a Major Co-Receptor for Primary Isolates of HIV-1. Nature 381: 661-666;						
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	70	Fradd, F., M.E. Mary. 1989. AIDS Vaccines: An Investor's Guide by Shearman Lehman Hutton. Page 10 (Fig. 2);						
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EXAMINER				DATE CONSIDERED				
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Examiner Initials	Exh. No.^s	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	80	2 0 0 2 / 0 1 0 6 7 4 2	08/08/02	Samson et al.			
	81	2 0 0 2 / 0 1 1 0 8 0 5	08/15/02	Samson et al.			
	82	2 0 0 2 / 0 1 1 0 8 7 0	08/15/02	Samson et al.			
	83	2 0 0 2 / 0 1 3 2 2 6 9	09/19/02	Li et al.			
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
	84	Co et al. 1991. Humanized Antibodies for Antiviral Therapy. Proc. Natl. Acad. Sci. U.S.A. 88: 2869-2873;					
	85	Trkola et al. 2001. Potent Broad-spectrum Inhibition of Human Immunodeficiency Virus Type 1 by the CCR5 Monoclonal Antibody PRO 140. J. Virol. 75: 579-588;					
	86	Olson et al. 1999. Differential Inhibition of Human Immunodeficiency Virus Type 1 Fusion, gp 120 Binding and CC-chemokine Activity of Monoclonal Antibodies to CCR5. J. Virol. 73: 4145-4155; and					
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FILE

Applicant William C. Olson, et al.
Client Progenics 2048 File No. 57906-A Att. JPW/SHS/GJC
Date June 19, 2000

Kindly acknowledge receipt of the accompanying

Information Disclosure Statement in connection with William C. Olson, et al., SYNERGISTIC INHIBITION OF HIV-1 FUSION AND ATTACHMENT, COMPOSITIONS AND ANTIBODIES THERETO, U.S. Serial No. 09/464,902, filed December 16, 1999 including PTO Form 1449, (Exhibit A), Search Report (Exhibit B) references (Exhibits 1-31), and Certificate of Mailing dated June 19, 2000.

by placing your receiving date stamp hereon and returning to us.

Applicant William C. Olson, et al.
Client Progenics 2048 File No. 57906-A Att. JPW/SHS/GJC
Date June 19, 2000

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Applicants: Olson and Maddon
Serial No. : 09/464,902
Filed: December 16, 1999
Exhibit G (v)

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Applicant William C. Olson, et al.
Progenics (2048) 57906-A JPW/SHS/AAB
Client June 14, 2001 File No. _____ Atty. _____
Date _____

Kindly acknowledge receipt of the accompanying

Supplemental Information Disclosure Statement in connection with William C. Olson, et al., U.S. Serial No. 09/464,902, filed December 16, 1999 for SYNERGISTIC INHIBITION OF HIV-1 FUSION AND ATTACHMENT, COMPOSITIONS AND ANTIBODIES THERETO, including PTO Form 1449 (Exhibit A), references (Exhibits 1 and 2), copy of International Preliminary Examination Report for PCT/99US/30345 (Exhibit B), and Certificate of Mailing dated June 14, 2001

by placing your receiving date stamp hereon and returning to us.

Applicant William C. Olson, et al.
Progenics (2048) 57906-A JPW/SHS/AAB
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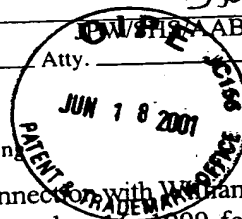


EXHIBIT G (2)

FILE

William C. Olson, et al.
Applicant _____
Progenics (2048) 57906-A JPW/MAF/DJK
Client _____ File No. _____ Atty. _____
Date September 2, 2003

Kindly acknowledge receipt of the accompanying

SUPPLEMENTARY INFORMATION DISCLOSURE STATEMENT in connection with William C. Olson, et al., U.S. Serial No. 09/464,902, filed December 16, 1999 for SYNERGISTIC INHIBITION OF HIV-1 FUSION AND ATTACHMENT, COMPOSITIONS AND ANTIBODIES THERETO including Exhibit A (PTO FORM-1449), Exhibits B-Q (references), Exhibit R (Search Report), a check for \$180.00 and a Certificate of Mailing dated September 2, 2003.

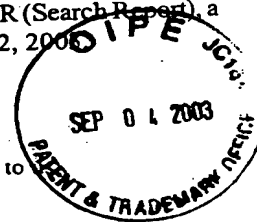
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William C. Olson, et al.
Applicant _____
Progenics (2048) 57906-A JPW/MAF/DJK
Client _____ File No. _____ Atty. _____
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EXHIBIT G (3)